

**REMARKS/ARGUMENTS**

In response to the Office Action dated July 30, 2003, claims 4-8, 11 and 14 are amended. Claims 1, 4-8, 11 and 14 are now active in this application. No new matter has been added.

It should be noted that dependent claims 4-8, 11 and 14 are amended to being with "The" instead of "A" and such change does not affect the scope thereof.

**REJECTION OF CLAIMS UNDER 35 U.S.C. § 112, FIRST AND SECOND PARAGRAPHS**

Claims 6-8 are rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the enablement requirements. The Examiner asserts that "The recited "hydrocarbon solution", as per claim 6 does not provide an enablement for solubility in aqueous media, as being lipophilic compounds".

Claims 7 and 8 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. The Examiner asserts that "The recited :hydrocarbon solution is alcohol" is indefinite, because by the virtue of "hydrocarbon definition" it is a compound that contains ONLY carbons and hydrogens.

To expedite prosecution, claim 6 is amended to recite:

The washing method as claimed claim 1, wherein a nonaqueous solution used in the nonaqueous washing process is a hydrocarbon solution.

Claim 7 is amended to recite:

The washing method as claimed claim 1, wherein the solution having solubility relative to both an aqueous solution and the nonaqueous solution in the intermediate washing process is alcohol.

Claim 8 is amended to recite:

The washing method as claimed in 7, wherein the solution used in the intermediate washing process is isopropyl alcohol.

Applicant submits that amended claim 6 is enabled by the present specification, and that amended claims 7 and 8 recite the invention with the degree of precision and particularity required by the statute. Therefore, it is respectfully urged that the rejections under 35 U.S.C. § 112, first and second paragraphs, be withdrawn.

### **REJECTION OF CLAIMS UNDER 35 U.S.C. § 102 AND § 103**

I. Claims 1, 6 and 14 are rejected under 35 U.S.C. § 102(b) as being anticipated by Nishi (USPN 5,868,864), which is an English equivalent of JP 9-208995, published 08/1997.

The rejections are respectfully traversed.

The factual determination of lack of novelty under 35 U.S.C. § 102 requires the identical disclosure in a single reference of each element of a claimed invention such that the identically claimed invention is placed into possession of one having ordinary skill in the art. *Helifix Ltd. v. Blok-Lok, Ltd.*, 208 F.3d 1339, 200 U.S. App. LEXIS 6300, 54 USPQ2d 1299 (Fed. Cir. 2000); *Electro Medical Systems S.A. v. Cooper Life Sciences, Inc.*, 34 F.3d 1048, 32 USPQ2d 1017 (Fed. Cir. 1994).

The invention recited in claim 1 is characterized in that a washing process has an intermediate washing process (of washing the object to be washed) between a nonaqueous washing process (of washing the object to be washed) and an aqueous washing process (of washing the object to be washed). In the intermediate washing process, *a solution having solubility relative to both an aqueous solution and the nonaqueous solution* is used.

Nishi discloses a method for washing an object, such as an optical element, which steps are best depicted by claims 11 and 17, namely:

first, dipping the object to be washed in a lipophilic agent;

second, dipping the object to be washed in an emulsifier;

third, dipping the object to be washed in a detergent;

fourth, dipping the object to be washed in water.

The Examiner asserts that the emulsifier and/or detergent of Nishi is the media described in the intermediate step of the instant claim 1, i.e. being soluble in aqueous and non-aqueous solutions. However, the Examiner's assertion is incorrect.

The first to fourth steps of Nishi correspond to the aqueous washing process of the present invention (See page 5, line 25-30 and page 8, line 4-8 (Fig. 5) of the present specification). Clearly, Nishi fails to disclose, *inter alia*, an intermediate washing process of washing the object to be washed using a solution having solubility relative to both an aqueous solution and the nonaqueous solution after said nonaqueous washing process, as required by claim 1.

Furthermore, although the emulsifier and detergent have a function of emulsification and dispersion, emulsification and dispersion are quite different from *dissolution*. Given such difference, there is nothing in Nishi that supports the emulsifier and/or detergent of Nishi being *a solution having solubility relative to both an aqueous solution and the nonaqueous solution* (the lipophilic agent).

The above argued differences between the claimed method vis-à-vis the method of Nishi undermine the factual determination that Nishi identically describes the claimed inventions within the meaning of 35 U.S.C. § 102. *Minnesota Mining & Manufacturing Co. v. Johnson &*

*Johnson Orthopaedics Inc.*, 976 F.2d 1559, 24 USPQ2d 1321 (Fed. Cir. 1992); *Kloster Speedsteel AB v. Crucible Inc.*, 793 F.2d 1565, 230 USPQ 81 (Fed. Cir. 1986). Applicant, therefore, submits that the imposed rejections of independent claim 1, and dependent claims 6 and 14, under 35 U.S.C. § 102 for lack of novelty as evidenced by Nishi, is not factually or legally viable and, hence, solicit withdrawal thereof.

II. Claims 7 and 8 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Nishi in view of Sherman “Emulsion Science” (Handbook), Academic Press, 1968, page 150.

The rejections are respectfully traversed. As claims 7 and 8 depend from independent claim 1, which is patentable over Nishi, claims 7 and 8 are patentable over Nishi also, even when considered in view of Sherman “Emulsion Science”.

Furthermore, as noted above, Nishi does **NOT** disclose the intermediate washing process (of washing the object to be washed using a solution having solubility relative to both an aqueous solution and the nonaqueous solution after the nonaqueous washing process) between a nonaqueous washing process and an aqueous washing process. “Emulsion Science” merely discloses HLB values and not the intermediate washing process (of washing the object to be washed using a solution having solubility relative to both an aqueous solution and the nonaqueous solution after the nonaqueous washing process). The mere disclosure of HLB values does not provide reasonable motivation for a person of ordinary skill in the art to modify Nishi to arrive at the invention now recited in claim 7; i.e., providing the intermediate washing process (of washing the object to be washed using a solution having solubility relative to both an aqueous solution and the nonaqueous solution after the nonaqueous washing process), wherein the

solution having solubility relative to both an aqueous solution and the nonaqueous solution in the intermediate washing process is alcohol (claim 7), and in particular, isopropyl alcohol (claim 8).

**III.** Claim 11 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Nishi in view of Morita (JP 05266412).

The rejection is respectfully traversed. As claim 11 depends from independent claim 1, which is patentable over Nishi, claim 11 is patentable over Nishi also, even when considered in view of Morita.

In this regard, as noted above, Nishi does **NOT** disclose the intermediate washing process (of washing the object to be washed using a solution having solubility relative to both an aqueous solution and the nonaqueous solution after the nonaqueous washing process) between a nonaqueous washing process and an aqueous washing process. While it is true that Morita discloses using ultrasonic vibration in the washing process, Morita does not disclose the intermediate washing process (of washing the object to be washed using a solution having solubility relative to both an aqueous solution and the nonaqueous solution after the nonaqueous washing process) between a nonaqueous washing process and an aqueous washing process also. Consequently, even if Nishi were modified in view of the teaching of Morita, the claimed invention does not result as there would be no intermediate washing process (of washing the object to be washed using a solution having solubility relative to both an aqueous solution and the nonaqueous solution after the nonaqueous washing process) between a nonaqueous washing process and an aqueous washing process.

IV. Claims 4 and 5 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Nishi in view of Osano et al. (USPN 5,334,258).

The rejections are respectfully traversed. As claims 4 and 5 depend from independent claim 1, which is patentable over Nishi, claims 4 and 5 are patentable over Nishi also, even when considered in view of Osano et al.

Furthermore, as noted above, Nishi does **NOT** disclose the intermediate washing process (of washing the object to be washed using a solution having solubility relative to both an aqueous solution and the nonaqueous solution after the nonaqueous washing process) between a nonaqueous washing process and an aqueous washing process. Although Osano et al. discloses the drying step using IPA, the drying step is after the washing process and the rinse step following the washing step, not between the intermediate washing process (of washing the object to be washed using a solution having solubility relative to both an aqueous solution and the nonaqueous solution after the nonaqueous washing process) and the aqueous washing process. In this regard, an object of the present invention is to prevent the rapid deterioration of the aqueous solution caused by the introduction of the nonaqueous solution into the aqueous solution. Such object is not described in either Nishi or Osano et al. Applicant submits that even if Nishi were modified in view of the teaching of Osano et al., the claimed invention does not result as there would be no intermediate washing process (of washing the object to be washed using a solution having solubility relative to both an aqueous solution and the nonaqueous solution after the nonaqueous washing process) between a nonaqueous washing process and an aqueous washing process.

V. In view of the above, the allowance of claims 1, 4-8, 11 and 14 is respectfully solicited.

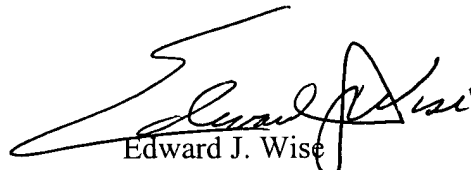
**CONCLUSION**

Accordingly, it is urged that the application, as now amended, is in condition for allowance, an indication of which is respectfully solicited. If there are any outstanding issues that might be resolved by an interview or an Examiner's amendment, Examiner is requested to call Applicants' attorney at the telephone number shown below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

McDERMOTT WILL & EMERY

  
Edward J. Wise  
Registration No. 34,523

600 13th Street, NW  
Washington, DC 20005-3096  
(202) 756-8000 EJW/dmd  
**DATE: October 28, 2003**  
Facsimile: (202) 756-8087